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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/327,713	06/08/1999	KIMIHIKO NISHIOKA	PM260332	5810

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EXAMINER

CHIEN, LUCY P

ART UNIT PAPER NUMBER

2871

DATE MAILED: 08/29/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/327,713	Applicant(s) NISHIOKA, KIMIHIKO	
	Examiner Lucy P. Chien	Art Unit 2871	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-36, 40-42, 48-84, 86, 88 and 91-126 is/are pending in the application.
- 4a) Of the above claim(s) 1-36, 50-83, 91, 99-115 and 118-125 is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☐ Claim(s) 40-42, 48, 49, 84, 86, 88, 92-98, 116, 117, 126 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 08 June 1999 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date ____. | 6) <input type="checkbox"/> Other: ____. |

DETAILED ACTION

Response to Arguments

Applicant's arguments with respect to claim 40-42,48,49,77,78,84,86,88 have been considered but are moot in view of the new ground(s) of rejection.

Election/Restrictions

Newly submitted claim 77,78,91,99-125 are directed to an invention that is independent or distinct from the invention originally claimed for the following reasons: These claims are not claiming Figure 57, which is the elected invention. Thus, will not be examined.

Since applicant has received an action on the merits for the originally presented invention, this invention has been constructively elected by original presentation for prosecution on the merits. Accordingly, claim 77,78,91,99-115,118-125 are withdrawn from consideration as being directed to a non-elected invention. See 37 CFR 1.142(b) and MPEP § 821.03.

ONLY Claims 40-42,48,49,84,86,88,92-98,116,117,126 will be examined.

Claim Rejections - 35 USC § 102

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 40,49,84,86,93-98 are rejected under 35 U.S.C. 102(b) as being anticipated by Togino (US 5513041).

Regarding Claim 40,

Togino discloses (Fig. 5) an optical system that forms a two-dimensional image (ABSTRACT), the optical system comprising a variable optical-property mirror (3) wherein the variable optical-property mirror (3) is arranged to be decentered (as shown in Figure 5) from a light incident –side optical axis, and wherein the variable optical-property mirror (3) has a reflecting surface that is deformable (column 6, rows 18-24).

Regarding Claim 93

Togino discloses (Fig. 5) wherein the optical system forms an image surface (14) on an exit side thereof, and the optical system further comprises an optical element (8, where 15 is located) arranged between the image surface (14) and the reflecting surface (3) of the variable optical property mirror (3)

Regarding Claim 94,

Togino discloses (Fig. 5) the optical system further comprises an optical element (8 also 3) having a rotationally asymmetric optical surface.

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Regarding Claim 95,

Togino discloses (Fig. 5) the optical system further comprises a rotationally asymmetric reflecting surface (3) where the rotationally asymmetric reflecting surface is arranged to be tilted in reference to an optical axis of the optical system.

Regarding Claim 96,

Togino discloses (Fig. 5) the rotationally asymmetric reflecting surface defines only one plane of symmetry.

Regarding Claim 97,

Togino discloses (Fig. 5) the optical system further comprises an optical element that has a plurality of rotationally asymmetric optical surfaces (8)

Regarding Claim 98,

Togino discloses (Fig. 5) the plurality of rotationally asymmetric curved surfaces are provided on a single optical element (3).

Regarding Claim 49,

Togino discloses (Fig. 5) a variable optical property mirror (3) and an optical element having a light-deflecting function (8) and disposed after the variable optical property mirror (3) in a single traveling path of rays (rays from 2 to 14) wherein a shape of a reflecting surface of the variable optical property mirror (3) is changeable (Column 8, rows 6-17), wherein the variable optical property mirror (3) is arranged to be decentered from a light incident side optical axis, and the optical element is rotationally asymmetric surface having a shape that defines only one plane of symmetry.

Regarding Claim 84,

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Togino discloses (Fig. 5) a variable optical property element (14) and a rotationally asymmetric reflecting surface (3) wherein the rotationally asymmetric reflecting surface (3) defines only one plane of symmetry, and wherein the variable optical-property element and the rotationally asymmetric reflecting surfaces are arranged to be decentered from one another.

Regarding Claim 86.

Togino discloses (Fig. 5) where the variable optical-property element is a reflection type element.

Claims 41,88,116,117 are rejected under 35 U.S.C. 102(b) as being anticipated by Gobeli (US 4932768).

Regarding Claim 116.

Gobeli discloses (Fig. 8,9,10) a reflection type variable optical-property element (68,70) having a variable optical power (Column 9, rows 44-60, tuning is adjusting the power along the mirror). An optical element (72) having a rotationally asymmetric surface wherein the reflection type variable optical property element and the optical element are arranged along a single traveling path of rays (shown with arrows) and are arranged to be decentered from one another.

Regarding Claim 117.

Gobeli discloses (Fig. 8,9,10) a plurality of variable optical-property elements (68,70) each having a variable optical power (Column 9, rows 44-60, tuning is adjusting the power along the mirror), an optical element (72) having a rotationally asymmetric

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optical surface, wherein the plurality of variable optical-property elements and the optical element are arranged along a single traveling path of rays, and wherein the variable optical-property elements (68,70) and the optical element (72) are decentered from one another.

Regarding claim 41,

Gobeli discloses (Fig. 8,9,10) A variable optical-property element (68,70) and a plurality of rotationally asymmetric curved surfaces wherein the variable optical-property element (68,70) and a plurality of rotationally asymmetric curved surfaces are arranged along a single traveling path of rays and wherein the variable optical-property element is arranged to be decentered from an optical axis of the optical system (72)

Regarding Claim 88,

Gobeli discloses (Fig. 8,9,10) the rotationally asymmetric curved surfaces of the optical element (68,70) are reflecting surfaces and are arranged to be decentered from the optical axis of the optical system (72).

Claim Rejections - 35 USC § 102

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claim 126 is rejected under 35 U.S.C. 102(e) as being anticipated by Nishioka et al (US 6888590)

The applied reference has a common assignee with the instant application.

Based upon the earlier effective U.S. filing date of the reference, it constitutes prior art

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under 35 U.S.C. 102(e). This rejection under 35 U.S.C. 102(e) might be overcome either by a showing under 37 CFR 1.132 that any invention disclosed but not claimed in the reference was derived from the inventor of this application and is thus not the invention "by another," or by an appropriate showing under 37 CFR 1.131.

Nishioka et al discloses (Fig. 9) a transparent optical element having an entrance surface and an exit surface that is different from the entrance surface; and a reflection type variable optical property element having a variable optical power, the reflection type variable optical property element arranged integrally with the transparent optical element wherein the transparent optical element and the reflection type variable optical property element are configured such that light enters the optical element through the entrance surface, where is reflected at the reflection type variable optical property element, and then exits out of the transparent optical element through the exit surface (other side of 14)

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim 92 rejected under 35 U.S.C. 103(a) as being unpatentable over Togino (US 5513041) in view of Mihara (US 4948234).

Togino does not disclose an image sensor.

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Mihara discloses an image sensor (Column 1, rows 10-20) which provide high aperture ratios and high vari-focal ratios.

It would have been obvious to one of ordinary skilled in the art to modify Togino to include an image sensor by Mihara motivated by the desire to provide high aperture ratios and high vari-focal ratios.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Lucy P. Chien whose telephone number is 571-272-8579. The examiner can normally be reached on M-F 8:30-5:00.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Nelms can be reached on (571)272-1787. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Lucy P Chien
Examiner
Art Unit 2871


ANDREW SCHECHTER
PRIMARY EXAMINER